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## NOTICE OF ALLOWANCE AND FEE(S) DUE

7055

7590

04/24/2008

GREENBLUM & BERNSTEIN, P.L.C. 1950 ROLAND CLARKE PLACE RESTON, VA 20191 EXAMINER

LY, ANH VU H

ART UNIT PAPER NUMBER

2616

DATE MAILED: 04/24/2008

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/773.396	02/09/2004	Hiroaki Sudo	P24788	6607

TITLE OF INVENTION: METHOD AND APPARATUS FOR SETTING A GUARD INTERVAL IN AN OFDM COMMUNICATION

APPLN. TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	NO	\$1440	\$300	\$0	\$1740	07/24/2008

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. PROSECUTION ON THE MERITS IS CLOSED. THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.

THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. THIS STATUTORY PERIOD CANNOT BE EXTENDED. SEE 35 U.S.C. 151. THE ISSUE FEE DUE INDICATED ABOVE DOES NOT REFLECT A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE IN THIS APPLICATION. IF AN ISSUE FEE HAS PREVIOUSLY BEEN PAID IN THIS APPLICATION (AS SHOWN ABOVE), THE RETURN OF PART B OF THIS FORM WILL BE CONSIDERED A REQUEST TO REAPPLY THE PREVIOUSLY PAID ISSUE FEE TOWARD THE ISSUE FEE NOW DUE.

#### HOW TO REPLY TO THIS NOTICE:

I. Review the SMALL ENTITY status shown above.

If the SMALL ENTITY is shown as YES, verify your current SMALL ENTITY status:

A. If the status is the same, pay the TOTAL FEE(S) DUE shown above

B. If the status above is to be removed, check box 5b on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and twice the amount of the ISSUE FEE shown above, or

If the SMALL ENTITY is shown as NO:

A. Pay TOTAL FEE(S) DUE shown above, or

B. If applicant claimed SMALL ENTITY status before, or is now claiming SMALL ENTITY status, check box 5a on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and 1/2 the ISSUE FEE shown above.

II. PART B - FEE(S) TRANSMITTAL, or its equivalent, must be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). If you are charging the fee(s) to your deposit account, section "4b" of Part B - Fee(s) Transmittal should be completed and an extra copy of the form should be submitted. If an equivalent of Part B is filed, a request to reapply a previously paid issue fee must be clearly made, and delays in processing may occur due to the difficulty in recognizing the paper as an equivalent of Part B.

III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Mail Stop ISSUE FEE unless advised to the contrary.

IMPORTANT REMINDER: Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.

### PART B - FEE(S) TRANSMITTAL

### Complete and send this form, together with applicable fee(s), to: Mail Mail Stop ISSUE FEE

Commissioner for Patents P.O. Box 1450 Alexandria, Virginia 22313-1450

or <u>Fax</u> (571)-273-2885

INSTRUCTIONS: This form should be used for transmitting the ISSUE FEE and PUBLICATION FEE (if required). Blocks 1 through 5 should be completed where

appropriate. All further indicated unless correcte maintenance fee notificat	correspondence including below or directed oth tions.	g the Patent, advance or erwise in Block 1, by (a	rders and notification of n a) specifying a new corres	naintenance fees wil pondence address; a	I be mailed to the curre and/or (b) indicating a se	nt correspondence address as parate "FEE ADDRESS" for
	ENCE ADDRESS (Note: Use Blo	ock 1 for any change of address)	Fee(	s) Transmittal. This rs. Each additional	certificate cannot be used	for domestic mailings of the I for any other accompanying nent or formal drawing, must
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						(Depositor's name)
						(Signature)
						(Date)
APPLICATION NO.	FILING DATE		FIRST NAMED INVENTOR	1	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/773,396	02/09/2004	•	Hiroaki Sudo	<u> </u>	P24788	6607
APPLN, TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE	FEE TOTAL FEE(S) DU	E DATE DUE
nonprovisional	NO	\$1440	\$300	\$0	\$1740	07/24/2008
EXAM		ART UNIT	CLASS-SUBCLASS			
LY, ANI	H VU H ence address or indication	2616	370-480000			
☐ "Fee Address" indi PTO/SB/47; Rev 03-0 Number is required.		Indication form ed. Use of a Customer	(1) the names of up to or agents OR, alternativ (2) the name of a single registered attorney or a 2 registered patent attorlisted, no name will be THE PATENT (print or typ	ely, e firm (having as a r gent) and the names neys or agents. If no printed.	nember a 2	
recordation as set forti (A) NAME OF ASSIC	h in 37 CFR 3.11. Comp GNEE	letion of this form is NO	I' a substitute for filing an a	and STATE OR CC	UNTRY)	document has been filed for
Please check the appropri	iate assignee category or	categories (will not be pr	rinted on the patent):	Individual 🖵 Cor	poration or other private g	group entity Government
`	are submitted:  Fo small entity discount p  For Copies	ermitted)	D. Payment of Fee(s): (Pleat A check is enclosed.  Payment by credit care The Director is hereby overpayment, to Depos	I. Form PTO-2038 i	is attached.	
a. Applicant claims	<b>tus</b> (from status indicated s SMALL ENTITY statu	s. See 37 CFR 1.27.	☐ b. Applicant is no long			
NOTE: The Issue Fee and interest as shown by the r	d Publication Fee (if requeecords of the United Sta	nired) will not be accepted tes Patent and Trademark	d from anyone other than the Office.	ne applicant; a regist	ered attorney or agent; or	the assignee or other party in
Authorized Signature				Date		
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This collection of inform an application. Confident submitting the completed his form and/or suggesti Box 1450. Alexandria, V	ation is required by 37 C tiality is governed by 35 d application form to the tons for reducing this bur irginia 22313-1450. DO	FR 1.311. The informatic U.S.C. 122 and 37 CFR USPTO. Time will vary den, should be sent to the NOT SEND FEES OR (	on is required to obtain or r 1.14. This collection is est depending upon the indiv e Chief Information Office COMPLETED FORMS TO	etain a benefit by the imated to take 12 mi idual case. Any com r, U.S. Patent and T D THIS ADDRESS.	e public which is to file (a inutes to complete, includent uments on the amount of rademark Office, U.S. De SEND TO: Commissione	and by the USPTO to process) ling gathering, preparing, and time you require to complete epartment of Commerce, P.O. er for Patents, P.O. Box 1450,

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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/773,396	02/09/2004	Hiroaki Sudo	P24788	6607
7055 7	590 04/24/2008		EXAM	INER
GREENBLUM (	& BERNSTEIN, P.L.	LY, ANH VU H		
1950 ROLAND C			ART UNIT	PAPER NUMBER
RESTON, VA 201	191		2616	
			DATE MAILED: 04/24/200	8

## **Determination of Patent Term Adjustment under 35 U.S.C. 154 (b)**

(application filed on or after May 29, 2000)

The Patent Term Adjustment to date is 844 day(s). If the issue fee is paid on the date that is three months after the mailing date of this notice and the patent issues on the Tuesday before the date that is 28 weeks (six and a half months) after the mailing date of this notice, the Patent Term Adjustment will be 844 day(s).

If a Continued Prosecution Application (CPA) was filed in the above-identified application, the filing date that determines Patent Term Adjustment is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) WEB site (http://pair.uspto.gov).

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (571)-272-7702. Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at 1-(888)-786-0101 (571)-272-4200.

	Application No.	Applicant(s)			
	10/773,396	SUDO ET AL.			
Notice of Allowability	Examiner	Art Unit			
	ANH-VU H. LY	2616			
	ANN-VO N. LT	2010			
The MAILING DATE of this communication apperature All claims being allowable, PROSECUTION ON THE MERITS IS herewith (or previously mailed), a Notice of Allowance (PTOL-85) NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RI of the Office or upon petition by the applicant. See 37 CFR 1.313	(OR REMAINS) CLOSED in this ap or other appropriate communication IGHTS. This application is subject to	plication. If not included n will be mailed in due course. <b>THIS</b>			
1. 🔀 This communication is responsive to after final amendment	<u>t filed March 21, 2008</u> .				
2. ☑ The allowed claim(s) is/are <u>1-11</u> .					
3. Acknowledgment is made of a claim for foreign priority ur	nder 35 U.S.C. § 119(a)-(d) or (f).				
a) ☐ All b) ☐ Some* c) ☐ None of the:					
<ol> <li>Certified copies of the priority documents have</li> </ol>	been received.				
<ol><li>Certified copies of the priority documents have</li></ol>	been received in Application No	·			
<ol><li>Copies of the certified copies of the priority do</li></ol>	cuments have been received in this	national stage application from the			
International Bureau (PCT Rule 17.2(a)).					
* Certified copies not received:					
Applicant has THREE MONTHS FROM THE "MAILING DATE" noted below. Failure to timely comply will result in ABANDONM THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.		complying with the requirements			
4. A SUBSTITUTE OATH OR DECLARATION must be subm INFORMAL PATENT APPLICATION (PTO-152) which give					
5. CORRECTED DRAWINGS ( as "replacement sheets") mus	et be submitted.				
(a) $\square$ including changes required by the Notice of Draftspers	on's Patent Drawing Review ( PTO-	-948) attached			
1) ☐ hereto or 2) ☐ to Paper No./Mail Date					
<ul><li>(b) ☐ including changes required by the attached Examiner's Paper No./Mail Date</li></ul>	s Amendment / Comment or in the C	Office action of			
Identifying indicia such as the application number (see 37 CFR 1 each sheet. Replacement sheet(s) should be labeled as such in the					
6. DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.					
Attachment(s) 1. ☐ Notice of References Cited (PTO-892)	5.	Patent Application			
2.  Notice of Draftperson's Patent Drawing Review (PTO-948)	6. Interview Summary				
Paper No./Mail Date  3. ☐ Information Disclosure Statements (PTO/SB/08),  7. ☐ Examiner's Amendment/Comment					
Paper No./Mail Date  4.	4. ☐ Examiner's Comment Regarding Requirement for Deposit 8. ☒ Examiner's Statement of Reasons for Allowance				
·	9.				

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Art Unit: 2616

#### DETAILED ACTION

### Allowable Subject Matter

1. Claims 1-11 are allowed.

The following is an examiner's statement of reasons for allowance:

The prior art does not teach or fairly suggest that the guard interval of the second valid symbol is greater than the guard interval of the first valid symbol; the second valid symbol being retransmission information and requiring higher channel quality than the first valid symbol, as specified in independent claims 1 and 11.

The prior art does not teach or fairly suggest changing the length of the guard interval of the first valid symbol in accordance with channel quality while maintaining the length of the guard interval of the second valid symbol, as specified in independent claim 8.

The prior art does not teach or fairly suggest providing the guard interval at a greater length when the valid symbol of retransmission information requires higher quality, as specified in independent claim 9.

The prior art does not teach or fairly suggest providing a guard interval of a valid symbol including retransmission information for control data at a length greater than a guard interval of a valid symbol including user data, as specified in independent claim 10.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

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Art Unit: 2616

Conclusion

2. Any inquiry concerning this communication or earlier communications from the

examiner should be directed to ANH-VU H. LY whose telephone number is (571)272-3175.

The examiner can normally be reached on Monday-Friday 7:00am - 4:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Chi Pham can be reached on 571-272-3179. The fax phone number for the

organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent

Application Information Retrieval (PAIR) system. Status information for published applications

may be obtained from either Private PAIR or Public PAIR. Status information for unpublished

applications is available through Private PAIR only. For more information about the PAIR

system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR

system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would

like assistance from a USPTO Customer Service Representative or access to the automated

information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Avl

/Anh-Vu H Ly/

Primary Examiner, Art Unit 2616

Application Number

Application/Control No.	Applicant(s)/Patent under Reexamination		
10/773,396	SUDO ET AL.		
Examiner	Art Unit		
ANH-VU H. LY	2616		

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